## ABSTRACT OF THE DISCLOSURE

A gateway apparatus according to the present invention, arranged between each of a plurality of circuit switched networks and the Internet, for transmitting data received from each of the circuit switched network to the Internet. The gateway apparatus comprises an expansion section expanding compressed data received from the circuit switched network, a compression section compressing the data expanded by the expansion section, a setting section setting a compression form, including a transmission rate on the internet protocol network, of data compressed by the compression section, and a controller transmitting the compressed data to the internet protocol network without performing expansion/compression processes by the expansion section and the compression section when the compressed data can be expanded by another gateway apparatus which should receive the compressed data and when a transmission rate on the circuit switched network of the compressed data is not higher than a transmission rate set by the setting section.